

Calculation of interaction of deformable designs taking into account friction in the contact zone by finite element method

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Abstract

© 2015 D. V. Berezhnoi and M. K. Sagdatullin. Finite element "master-slave" a technique of contact interaction of elastic deformable bodies taking into account friction in a contact zone is realized. The proved from the point of view of the solution of extreme tasks with restrictions like inequalities, projective algorithm which received the name "algorithm of a projection of the next point" was used. The model problem of contact interaction of two deformable subdesigns is solved, comparison of results with the data obtained by other authors is carried out.

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Keywords

Contact, Finite element method, Friction